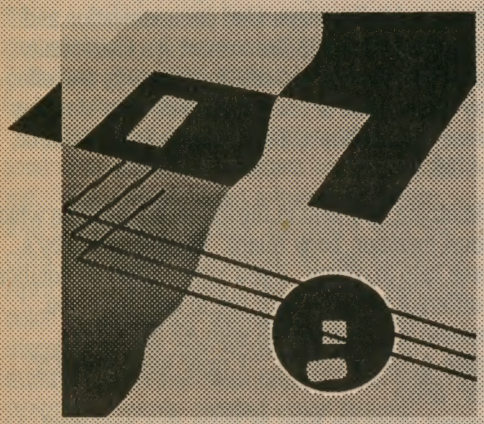
The Co-op Spirit

PEOPLE HELPING PEOPLE WITH PERSONAL TECHNOLOGY *JUNE 1991*



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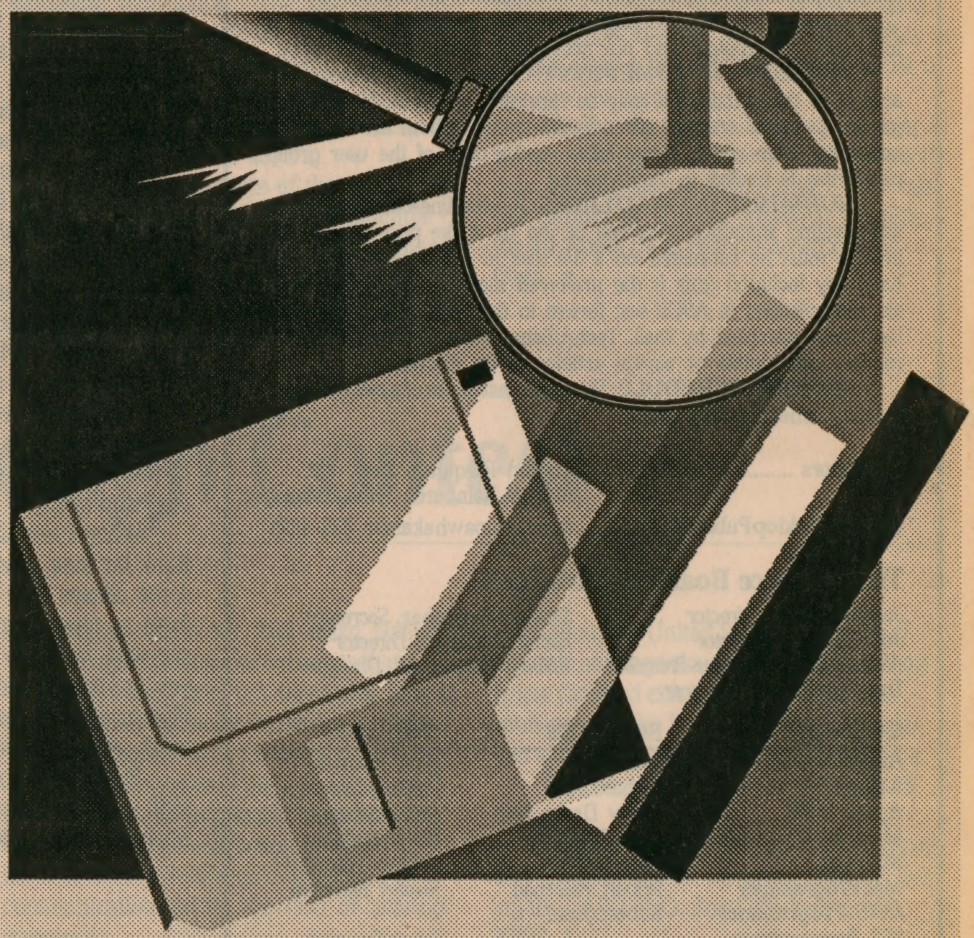

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THE CO-OP SPIRIT is the monthly newsletter of TechAlliance, a non-profit computer cooperative committed to providing members with resources that increase the understanding and enjoyment of personal computers. The co-op provides members with user groups for the Amiga, Apple // Family, Macintosh, and MS-DOS machines. Both beginning and advanced assistance are provided at our various Special Interest Group Meetings. The Kent, Washington office is presently being set up as a resource center for our local members. Members can peruse the software and book library. This newsletter is our official organ and is sent to every member. It consists mostly of contributions from the membership which include industry news, machine-specific articles, and other items of interest.

MEMBERSHIPS: TechAlliance Memberships may be obtained by filling out the form on the back cover of this newsletter and mailing it, along with your dues, to TechAlliance. Annual Membership dues are $25.00 per year; $35 per year outside the U.S.

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SUBMISSION DEADLINES: The deadline for articles, news, and meeting announcements will be the 1st of the prior month. All articles must be submitted on a 3½"disk in ASCII text format with hardcopy included *(this is the preferred method)*, or articles may also be uploaded in ASCII text format to the TechAlliance BBS with hardcopy submitted by mail. TechAlliance reserves the right to review, edit, delete or accept articles at its discretion.

MEETING SCHEDULE: Please see last pages of newsletter for meeting schedules and times.

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Member Needs Help

• Matthew Wood needs information regarding PC connectivity possibilities for a Penske Romich Express III #6. His 24 year old daughter is confined to a wheelchair with cerebral paulsey and communicates through the Penske board with a mouth wand. It is a very tedious means of communication. She used an Apple IIe clone while she was in school, but she is out of school now and needs something beyond the Apple IIe's potential. They are looking for the capability to connect to a personal computer that would allow expanded communication and work possibilities. His daughter would like to start at a Community College, but needs to be able to communicate more rapidly and effectively. If you have any information or leads that could help Matthew and his daughter, please contact him at 21919 - 116th St SE, Monroe, WA 98272, (206) 794-5769.

• John, from Midlothian, VA, sent in the following question which was answered by a local member, Toby Allard. We thought Toby's answer may be of some help to others. If you have a different solution to this problem or a different problem we'd like to hear from you.

Question: My system is an Apple IIGS with AE hard disk, Transwarp and system 5.0.4 of GS/OS. I now have two 3.5" drives and one 5.25" drive.

Can anyone suggest ideas on how to solve this problem? I have created a DOS 3.3 partition on my AE HD and loaded (Slot 7, Dr 1, Vol 2 & 3) the Apple II+ version of PAF (Personal Ancestral File) from LDS, Salt Lake City. Obtained this copy because two other persons (at least) felt they could not use it efficiently on their Apple's. Booting this partition and running the "Hello" in vol 2 produces the correct main menu , but any further requests by the main program for machine program segments causes searching in slot 6—not slot 7. Also, the program does not recognize any disk in slot 6, so it continues to give errors. . . . LDS is no longer selling or supporting the Apple II version and gave me permission to obtain a copy from someone if I wanted. . . . I have tried to disassemble with 6502, but the results produce many illegal codes. Using 65c02 for the disassembly produces no illegal codes, but re-assembly does not match the original code. Your comments would be appreciated.

Answer: The problem you spoke of is probably in the design of the program itself. Many DOS 3.3 programs were designed to read and write to slot 6 drives one and two.

When I was in High school they were using the Apple Grade Book for their grades. When the amount of data got too large in some classes they couldn't use the program any more. So I set forth to reprogram the software. I made it so it would check to see what volumes were on line. If you can catalog the disks that you are having the problem with, you may be able to use CopyII Plus to convert the entire program to ProDOS. Then it should work with your system.

By the way my name is Toby Allard and I have an Apple IIGS with 2 Meg of memory and several devices to go along with it. My interests include programming and desktop publishing. ▲

Abstract Art on the Apple II+

By Art RadCliffe

My first program was abstract art of a sort: making a frictionless ball carom around the screen of Whirlwind during an engineering summer session at MIT in the fifties. I discovered and explored the gracefulness of some mathematical expressions on a DEC PDP8 I had in my office in the late sixties.

The impressionist painters and the total abstractions of modern art appeal to me. When I read about a home computer that could put out color in 1979 I was excited and bought my Apple II+ the following April. The first thing I did was put random color spots on my television screen and discovered that the Applesoft random number generator was faulty. The first program I wrote created color shapes which resembled some of the abstract forms of Kandinsky, my favorite painter.

Experiments with creation of unmoving patterns or with simple repetitions proved these to be quickly boring and I looked for means to create more subtle images and a continually changing screen of color. I gradually found out how to do this by using the random number generator in a way that mixed randomness with mathematical constructions.

A course in 35MM photography taught me something of composition and books on modern art had useful paragraphs on how painters put rhythm and harmony on a still canvas. It was also clear that artists had to master their medium, oils, watercolor or whatever, before they could put on the canvas what they saw in their mind. These ideas were in the back of my head as gradually I acquired a color monitor, disk drives, an accelerator and helpful software.

BASIC proved too slow for an actively changing screen from the very beginning and I started learning assembly language to speed up the slow parts of the programs. With Applesoft it is extremely simple to switch to an assembly language routine: you simply enter CALL 12345, if that is the location of the routine, and when done it returns automatically to the next Applesoft instruction. The assembly routines are written with the Merlin assembler and I work bugs out with Maxwell's Demon, a debugger which is also a great teaching instrument, showing just how the Apple works "at it's core".

With the appearance of the Amiga and PC video boards I explored the potential of a switch to these machines. Their color capabilities were very attractive, but they proved to be extremely awkward in switching between Basic and Assembly routines. The ease of such switching has ben vital in relating to the Apple II+ as my medium. I did acquire a used IIe to see what could be done with more colors and higher resolution. The IIe is different enough that it has clarified my sense of what it is to master a medium as painters and sculptors use that word. Oils, acrylics, clay and stone all have specific potentials and limitations, and so it is with computers.

I am learning how to make the most of the II+ as a medium and find it limiting only when I try to make it something it is not. The challenge of finding out what else it can do will keep me busy for a long time to come.

A point to be made in conclusion is that for me special art software tends to become a medium in itself. While making great things simpler this software tends to expose only a part of the total potential of the raw computer.

Finally, the original Apple is special in it's simplicity, even though this simplicity may initially be overwhelming. This relative simplicity is what makes it possible for the Apple II+ to become an artist's medium. ▲

$10,000 Design Contest

The Johns Hopkins University is conducting a nationwide Search for Computing Applications to Assist Persons with Disabilities. The National Search is a competition for ideas, systems, devices, and computer programs designed to assist the more than 25 million Americans with physical or learning disabilities. A $10,000 Grand Prize will be awarded at the National Exhibition at the Smithsonian Institution in Washington, D.C. Other events include regional competitions, television workshops, exhibitions, and fairs at museums all over the country.

According to the information received at TechAlliance offices, Mr. Paul Hazan, National Search Project Director, emphasizes that a competition entry does not necessarily have to involve high technology, but that it is more important that the entry be useful and affordable. Some examples of the type of entries that might win awards would be an effective computer-assisted instruction program for learning disabled children or a tutoring or communication aid for the deaf or hearing impaired.

The primary purpose of the program is to encourage innovative minds in computing throughout the United States to develop affordable and ingenious applications for their fellow disabled citizens. This program is sponsored by the National Science Foundation and MCI Communications Corporation.

The competition deadline is August 23, 1991.

Persons wishing to enter the competition should request an entry flier by writing to: CAPD, P. O. Box 1200, Laurel, MD 20723 ▲

Overcoming the Finder Alert

by Dominic Mazzoni

It must be the most common, least understood Finder alert there is (See Figure 1). It appears when you double-click a document the Finder doesn't recognize. For example, most clip art is distributed as MacPaint files. Unless you own MacPaint, you can't double-click a MacPaint document to open it. Instead, you have to open your own graphics program (for example, SuperPaint) and open the clip art from there. The cause of the problem is in every file's Type and Creator.

When the Macintosh was introduced in 1984, a file's Type and Creator were invisible to all but programmers. Now, with increasing numbers of file utility programs and so-called power users, they are familiar to more people.

Type is the four-letter tag given to every Macintosh file which identifies what kind of file it is, similar to DOS' three-letter file name extension (i.e. COMMAND.COM, PROGRAM.EXE, RECORDS.DB). Each of the four letters can actually be any possible printing character, but they're usually alphabetical. Common Macintosh file Types include Application ('APPL'), Picture ('PICT'), Startup document or Init ('INIT'), and literally thousands of others.

Creator is a four-letter tag, also given to every Macintosh file, that identifies which application created it. Those four letters correspond with one application's Signature. Every Macintosh application which either creates it's own documents or it's own icon must have this unique, four-character Signature, used as the Creator in any document that application creates. An application's Creator is usually set to it's own Signature.

Sometimes, when a file is recovered from a damaged volume, the Type and Creator are lost. In cases such as this where the Type and Creator are unknown, the Type and Creator each become '????'.

When you open a file in the Finder, the Finder first looks at the file Type. If it's an application ('APPL'), it launches the application. If it's anything other than 'APPL', it finds and opens the application whose Signature matches the document's Creator and launches that application. If it can't find a matching Signature, the Finder displays an alert which says the application wasn't found (Figure 1).

Now back to the ultimate question: Is it sometimes necessary to open the appropriate application first instead of open some documents from within the Finder? No, all you need to do is change the Creator of every document that doesn't open from the Finder to a different application's Signature.

In order to make changing the Creator of a file easier, I've written a program, New Creator, that changes the Creator of any Text, Pict, or Paint document to a different application, one which you own. This program also searches an entire volume for all files of a certain Type to make it easier. For example, in just a few seconds I changed the Creator all of my clip art files, which included both MacPaint and FullPaint documents, to 'SPNT' (SuperPaint's Signature), so that my SuperPaint application will open them by a double-click on the Finder level. There is no risk involved in changing the Creator, because the process is 100% undo-able. New Creator will be available by the time you are reading this, on the TechAlliance BBS and other online services.

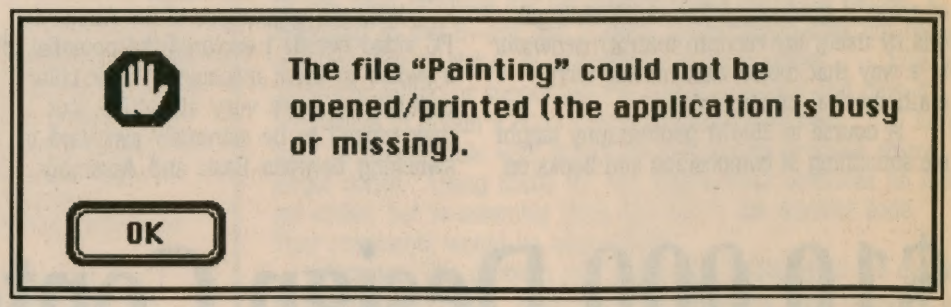
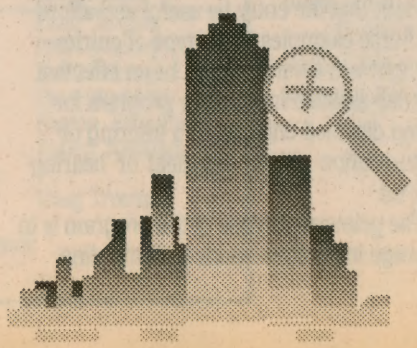


Figure 1: One of the most aggravating Finder Alerts.

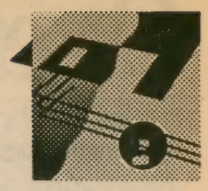
Communications Basics - Part II

This series is being retyped for the Co-op Spirit (with permission) from BOARDWATCH Magazine by Peter Barnes, our Amiga SIG Chairperson. Peter is currently vacationing in England, but we hope to have the second part of this two part series in our next issue.



FYI The size of this newsletter is dependent on the number of articles submitted by our members — Editor

BITS AND BYTES



By Bill Cowell

HARDWARE MADNESS

I thought that I would pass on a couple of recent experiences I have had with older systems. The first involved a old IBM PC. You know the one, where you went out to lunch while it was booting up. After you finally got it booted up, things really slowed down. Well anyway, there are still a few of these machines still cranking away. This particular one finally had a serial port die and required a replacement. No problem, huh? First, we couldn't remove the old board with the bad serial port since all the system memory was on it. Solution, just free a slot by removing the second printer port. Pop in the new card and everything should be fine. We should be so lucky? We tried using the port with LapLink to transfer some files. No luck. Well lets see if the port is all right. We hooked a modem up to the port and it worked just fine. Now call Traveling Software to see if they could figure out why LapLink wasn't working. We spoke with a very knowledgeable gal who walked us through several hardware/software checks, but still no luck. The latest version of LapLink will work with parallel ports, so we then tried that. It worked fine: So what is the problem with the serial port? The computer acknowledged that it only had one serial port; why wouldn't it work as Com 1. The only thing left to try was a change of interrupt. Pulled the board out changed the settings to Com 2 with IRQ #3, and the board worked fine. Apparently the dead serial port still had its hooks on interrupt #4. I refuse to admit how long it took us to arrive at this cure.

The next problem was with a 286 machine with a Seagate 251 40MB hard drive. Somehow the owner had managed to trash the drive. He started from scratch to reformat the drive and reload files. The only trouble was, after reformatting the system still wouldn't boot on the hard drive. If we tried to use the SYS command to install the system on the hard drive, we got an error message that there was no room on the completely empty drive. I then tried the OnTrack Disk Manager set up program and the disk still wouldn't boot. Next I went to the AMI diagnostic program to check out the complete system, specifically the hard drive. Everything checked out fine. I went one step further and used the AMI program to do a media check and blocked out bad sectors. That did it. Apparently the Sector that the SYS command was trying to install to, was bad.

The above is just a lead into the following. As your system gets older, the probability that you will lose your CMOS setup configuration, at some time or another, increases. More and more I am hearing from computer owners that have had problems of this type. One of the more normal causes for loss of CMOS configuration, is battery failure from age. Other causes aren't so easy to identify. If you know what your configuration was, it is relatively easy to key this in again. The message is: Be sure that you know what the correct values are, which should be in the configuration shown in your CMOS. Documenting this information is more critical with the new IDE type drives. They usually require user defined parameters. These drives aren't in the list of so-called standard hard drive configurations shown in the CMOS ROM file. If you haven't recorded the values which were used when your hard drive was setup, you could be in for trouble. Use of different values will result in losing all the files on the hard drive.

WINDOWS PROGRAMMING

Sometime this year Microsoft will probably release a Windows version of Basic. Beta testers of the program say they have been able to write a Windows program in as little as half an hour. The program will include a toolbox of drawing tools which will let a user construct a Windows interface by drawing it on-screen. Don't expect Quick Basic pricing though. Best guess is the list price will be about $250. In the mean time Borland has already released a program called Object Vision which may be just what you need if you want to program for Windows. Introductory pricing is only $99.

NOT JUST A PRETTY FACE

As users dig closer into Windows 3.0 they are discovering uses that are above and beyond just a prettier user interface. One of these aspects is the Dynamic Data Exchange (DDE) capability. This isn't even mentioned in the Windows Users Guide. Using this Windows capability will allow co-resident Windows applications to pass data and commands back and forth. The Windows application must include provisions for using this capability. The Microsoft applications such as Excel and Word for Windows include this capability, but many third party programs do not. If the application does support DDE then you can use the "Paste Link" command found in one of the pop down menus. This will provide a much more powerful link between programs than that of using the Clipboard.

Even Microsoft is recognizing that there is a lot of information that users need to make good use of Windows. They have just released a help pack called the "Microsoft Windows Resource Kit". It's suppose to contain over 200 pages of tips and tricks to improve your use of Windows. It's available direct from Microsoft for $20, including shipping.

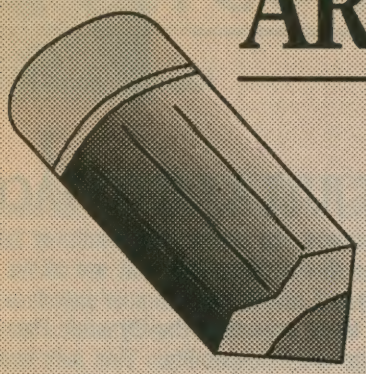
SHAREWARE OF THE MONTH

This months recommendation is for two updates to a couple of my old time favorites. The first is Directory Scanner, the hard drive manager that I keep going back to. I do this even though I have Windows, PC Tools, etc. These are all suppose to have the same capability, but I find DS much easier to use. The update is suppose to cure some minor problems the program has had with some of the current crop of extended memory managers.

The other program is Telix. The latest version is 3.15. Look for it on your friendly BBS under the title TLX315-1, -2 and - 3.Zip. This telecommunications program compares favorably with Procom Plus. In fact I believe it supports even

continued on page 6

ARNON LOAWHAKASETR



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BITS AND BYTES...continued from Page 5...

more transfer protocols than Procom Plus. The current update is mainly a bug fix, so most users probably won't notice any differences. If you do update, you probably just need the program files which come with TLX315-1. The documentation really hasn't been changed.

SOFTWARE NOTES

Borland has already done another update to Quattro Pro. The just released version 3.0, has improved WYSIWYG (What you see is what you get), and now can use Bitstream fonts. It also allows you to do a 200% zoom in or do a 25% birds-eye view of a spreadsheet. Probably of more use is the addition of a "print to fit" capability. Upgrade from version 2.0 to 3.0 is $49.95. The so-called competitive upgrade has gone from $99.95 to $129.95.

On a more local note, a West Seattle software programmer announced the release of two programs. CDE Software recently released two programs just for BOWLERS. The first is called Bowlers Diary. It can be used to keep track of your personal bowling statistics. It keeps a running account of your average, etc. It will even tell you what you have to bowl over the next few weeks to raise your average one or more pins. For a limited time the program is available for only $15. If you are lucky, or unlucky, enough to be a league secretary, the other program is for you. This program is called Bowling League Secretary. It will automate all the tasks of keeping track of one or more bowling leagues. Should be a real labor saver for a league secretary.

InfoWorld has just reviewed all the popular C Compilers. Borland C++, with a 9.3 rating, was head and shoulder's above the competition. Microsoft came in third with a rating of 7.3.

HARDWARE NOTES

VGA Boards were the subject of the April 15th issue of InfoWorld. In a rather unusual switch, it was two of the lower cost boards that got the best ratings. Top rated board was the STB Powergraph ERGO with a rating of 8.1. List price on this board is $315. The SuperVGA board from Boca, rated 7.8, was the lowest priced board with a list price of $245. Some of the better known boards had list prices that were more than double these prices.

The other half of the video partnership is the monitor. A couple of recent reviews confirms my belief that you should get a VGA monitor with at least a .31 dot pitch or smaller. Fortunately this is no longer an expensive problem. Reasonably priced VGA monitors, with .28 dot pitches are now readily available. What was more of a surprise, both reviews questioned the value of 1024 x 768 resolution on a 14 inch screen. They claimed that you need to go to at least a 16 inch screen if you want to work with this resolution. I must admit that after looking at a 17" flat screen on a Idek monitor I was convinced. Unfortunately these larger monitors cost roughly double the cost of the more conventional sized 14" screen monitors. ▲

Batch File Program Manager

By: Steve R. Cavanaugh

When I first started using MS-DOS, I was elated by the ability to set up complex directory structures on my hard drive. It wasn't long before I had managed to set up a structure that was so complex, I couldn't remember where anything was located. All I wanted to do was find programs to run them, and find the files created by those programs in order to do file management. This seemed like a worthy problem to tackle, and I tried several methods before arriving at the method described here.

The first several solutions I tested involved programs that claimed to "automate DOS commands." Unfortunately, they get in the way if you want to use more complex commands than what are supported. They also take up memory, or interfere with other programs by staying memory resident. I could see that I wanted to operate my DOS computer from the command line, but I wanted to automate things too.

By this time I was getting a good handle on writing batch files, and it struck me that a set of batch files might be just the thing to solve my problems. I played around with a few ideas, and pretty soon I had developed a system that works. Although this method is hardly revolutionary, it's surprising how powerful it can be. This is what I like to call an elegant solution to a simple problem.

First, create a subdirectory on your hard drive, and call it BAT. It doesn't matter where the subdirectory is located, but for this example we will assume it to be on the C: drive. Next, you have to modify your AUTOEXEC.BAT path statement to point at the BAT subdirectory. Your path statement should include something that looks like this: PATH=C:\BAT; For those of you who aren't sure how to do this, see your DOS manual. Once your AUTOEXEC.BAT file is modified, you have to reboot your computer for the changes to take place.

Putting the BAT subdirectory in your AUTOEXEC.BAT path statement allows you to run batch files contained in that subdirectory from any directory on your hard drive. This is the secret that makes this solution elegant.

On a piece of paper, make a list of your directory structure, so that you know where all of your programs are, and where the data files for those programs are located. For example, if you have Word Perfect installed, it may be in C:\WP51, and the files may be in C:\WPDOCS. List all of the programs that you want to have in your menu. These should be the ones you run often. Don't include .COM files unless they start a real application. Next, log to the BAT subdirectory, and using a text editor, create a file called MAIN.MEN. A simple one might look like this:

```
**********************************
1)Word Perfect
2)Lotus 123
3)Procomm Plus
4)Windows
**********************************
```

Make sure to save the file as ASCII text, or this won't work.

Now create a file called MENU.BAT and put the following commands in it:

```
echo off
cls
type C:\BAT\MAIN.MEN
```

The "echo off" part of the file is a DOS thing that prevents all of the commands in the batch file from being displayed on the screen as they execute. The "cls" command clears the screen. Once this file is entered and saved, no matter where you are in the directory structure, all you have to do is type MENU and the list will be displayed on screen. Nifty! Be sure you've rebooted your computer after changing your AUTOEXEC.BAT file, then give it a try.

Now, using the same text editor, create a file called 1.bat, and put in all of the commands normally used to start Word Perfect. For the example above, the text would look like this:

```
echo off
c:
cd\wp51
wp
menu
```

Once this batch file is saved, you will be able to start Word Perfect from any subdirectory on your hard drive, simply by typing a 1. The batch file logs you to the C: drive, changes to the Word Perfect subdirectory, and starts Word Perfect. DOS does a nifty thing here too: When you have a command in a batch file that appears after the one that starts a program, DOS saves the rest of the batch file in the DOS environment while the program is running, then when you quit the program, DOS finishes running the batch file. That is why the command MENU appears after the command WP in the Word Perfect batch file: It puts the list up on the screen after you quit Word Perfect.

Next, again using the text editor, create a batch file called D1.BAT. In this file, you put all of the commands required to go to the subdirectory that contains the Word Perfect files. Try it like this:

```
echo off
c:
cd\wpdocs
menu
```

This time we didn't put in a command to run a program, we just changed to the directory and issued the MENU command. This puts you in the directory, ready to do your file management.

Repeat the above for each program, and you will have a very simple yet functional "Program Manager" without ever leaving DOS. I use this method every day, and I swear by it. Of course, I've added a few bells and whistles along the way: ANSI escape sequences to put my menu list in a shadow-box window; date and time; and a quote of the day. Go ahead! Play around a little bit, and personalize your system. I can't seem to leave mine alone! ▲

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Signature _____

CS0691

June Meeting Schedule

***Advance sign-up required for these meetings.*

Tue., June 4th:	IIGS Beginners Session - 7:00 p.m. IIGS (& II Family) SIG - 7:30 p.m.
Tue., June 11th:	Mac Help Session - 6:45 p.m. Mac SIG meeting - 7:30 p.m.
Wed., June 12th:	Amiga New User Class - 6:30 p.m.** AMIGAlliance - 7:30 p.m.
Sat., June 15th:	Amiga New User Class - 10:00 a.m.**
Tue., June 18th:	Voluntary Advisory Comm. 7:00 p.m.
Wed., June 19th:	Mac Programmers SIG - 7:00 p.m.
Tue., June 25th:	MS-DOS Beginner's Corner - 6:30 p.m. MS-DOS SIG meeting - 7:00 p.m.
Tue., July 2nd:	IIGS Beginners Session - 7:00 p.m. IIGS (& II Family) SIG - 7:30 p.m.

Meeting Location: All meetings are held at the office unless otherwise specified.

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